



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

MEMORANDUM

To: The Board of Oil, Gas and Mining

From: Susan C. Linner, Reclamation Biologist *SCL*

Subject: Tentative Approval
Tosco Development Corporation
Sand Wash Development Shaft and Mine Project
ACT/047/001

Date: June 17, 1982

The Division of Oil, Gas and Mining has reviewed the Mining and Reclamation Plan submitted by the Tosco Development Corporation for its Sand Wash Development Shaft and Mine Project and feels that the plan meets the requirements of the Utah Mined Land Reclamation Act. The Division seeks the Board's concurrence for the issuance of tentative approval, and for the amount and form of the surety. An Executive Summary and Bond Estimate are attached for your information and review.

SCL/tck

Attachments

EXECUTIVE SUMMARY

Tosco Development Corporation
Sand Wasn Development Shaft and Mine Project
ACT/047/001, Uintah County, Utah
Section 35, Township 9 South, Range 21 East

Background Information

Tosco Development Corporation, a wholly owned subsidiary of Tosco Corporation, has submitted a Mining and Reclamation Plan (MRP) for the Sand wash Development Shaft and Mine Project. The project will consist of the excavation of a mine shaft to a depth of approximately 2,460 feet from the surface and the construction of surface mine support facilities. An experimental mining program, designed to obtain data for optimizing a commercial mine design, will be conducted in the mahogany zone, located approximately 2,290 feet from the surface. The project is expected to last for 3.5 years from the time construction commences. The MRP was written to take into account the "worse case" scenario, whereby a commercial mining phase would not be initiated and final reclamation would occur at the end of this project.

Though the oil shale industry in general and Tosco Corporation, in particular, have fallen on hard times recently, Tosco has emphasized their desire to implement this experimental phase as soon as possible. They are anxious to receive their permit so that on-site work can begin. This spring Tosco volunteered to be the first Utah mine to have their MRP undergo a streamlined joint review process by all concerned State agencies, similar to a process used in Colorado. Through this process, the MRP has been well reviewed by various State agencies.

Location

The Sand Wash Development Shaft and Mine Project will be located approximately 30 miles south of Vernal, Utah. The site is leased from the Division of State Lands and Forestry under Utah mineral leases ML-20641 and ML-20642. The surface facilities of the project will be located on Section 35, Township 9 South, Range 21 East, SL&M, Uintah County, Utah. Experimental mining will occur under Section 35 and adjacent areas of Section 34. A map showing the exact location of Tosco's holdings is attached.

Geology

The Sand Wash Project site is located on the south side of the Uintah Geologic Basin of northeastern Utah. The Uintah Basin is outlined by the Uinta Mountains on the north and by the Roan Cliffs on the south. The south flank of the basin dips gently, with a few low-relief northward and westward plunging folds and a few minor faults of small displacement occurring. Rocks at the surface of the project site consist of sandstone, siltstone and shales of the Uintah Formation. These and the underlying marlstone of the Green River Formation will be transected by the development shaft.

Soils

The area to be affected is a typical mosaic of badland rock outcrops and thin soils grading from loamy sands into sands, cobbly soils and rock outcrops. Due to the poorly developed nature of the soils, the entire area to be disturbed will not be suitable for soil removal. The applicant proposes to remove 12 inches from the rock outcrop complex and 20 inches in the loamy

sands. A qualified professional will be on-site to ensure maximum soil recovery. An estimated 18 acre-feet of soil and subsoil will be stockpiled. The Division is still negotiating with Tosco on some soil matters, but these will be cleared up by the end of the 30-day public comment period.

Hydrology

The Sand Wash Development Shaft and Mine Project area lies within two tributary drainages to the White River. These ephemeral tributaries are Cottonwood Wash and North Wash. The proposed shaft site and support facilities are situated within a 39 acre drainage basin, the majority of which drains into North Wash. The area on the divide between the two drainages will be graded to drain into North Wash. Tosco has operated alluvial ground water monitoring wells in the channel deposits of Cottonwood, North and Sand washes. Ground water has also been encountered at depth during core hole drilling. The shaft is expected to encounter saturated zones, and precautions to restrict inflow to the shaft, primarily through grouting, are incorporated into the shaft design.

Ecology

Three vegetation community types occur on the project site: mixed desert shrubland; matscale shrubland; and, essentially nonvegetated areas. Dominant species in the mixed desert shrubland include spiny horsebrush, shadscale and plains prickly pear cactus. This shrubland type is characterized by the dominance of a relatively high number of different shrub species and by a sparse herbaceous layer. The matscale shrubland community occurs on flat upland areas, that tend to be clayey and somewhat saline. The major shrub species are mat atriplex, Castle Valley clover and budsage. The herbaceous layer here is also sparse. The essentially nonvegetated areas occur on steep rocky slopes and dry stream channels, where the vegetation is very sparse. No threatened or endangered species have been found to occur on the study area. The applicant has not yet submitted specific data on revegetation standards for success, but has committed to do so prior to disturbance.

Quantitative and qualitative wildlife data have been collected on small mammals, big game mammals, predators and birds. Common species include the desert cottontail, deer mouse, Ord's kangaroo rat, pronghorn antelope, coyote, Brewer's sparrow, sage sparrow, redtailed hawk, American kestrel and golden eagle.

Structures and Facilities

Surface facilities will include a hoist house, power generation facilities, sewage and water treatment systems, two dry houses, offices, a headframe and a shop/warehouse. The mined oil shale rock will be hoisted to the surface and stockpiled. No crushing or retorting of the oil shale will take place on-site during this operation. The principal access road to the shaft site is an existing dirt road which will be upgraded to a 28-foot wide gravel-surfaced road. Approximately two miles of new road will also be constructed on Tosco leases.

Mining and Reclamation

During Operations:

1. Approximately 39 acres, confined to one drainage basin, will be disturbed.
2. A sedimentation pond, mine water retention pond and ditches around the retention pond will be constructed during the first phases of site preparation.
3. As much topsoil and subsoil as can be reasonably picked up will be saved during site preparation. One or two stockpiles will be present on-site, depending on the chemical characteristics of the materials available. Stockpiles will be protected from erosion by vegetation or other means.
4. No oil shale crushing or retorting will take place on-site. Coarse ore will be stockpiled on-site.
5. An existing road will be upgraded for mine access, with two miles of new road built.
6. A drainage ditch with a minimum bottom width of two feet will parallel all roads. All drainage structures will be designed for the two-year flow event. Straw bales will be used where appropriate to control sediment yields from disturbed areas.
7. Waste rock from the development shaft will be used to construct part of the pad.
8. If large amounts of water are encountered during shaft sinking, grouting will occur.
9. The ventilation system for the shaft will be constructed for the possibility of a gassy mine.
10. All wastes generated on-site will be transported to the Uintah County landfill and disposed of. No toxic materials or hazardous wastes will be generated.
11. Mine water will be discharged to the surface to the mine water retention pond. It is planned that water collected in the retention pond will be treated as necessary and re-injected into the Bird's Nest Aquifer.
12. Sewage and water treatment plants will be built on-site. Some accumulated sludge will have to be shipped to an approved landfill.

After Operations:

1. All buildings, structures and tanks, and the headframe will be disassembled and removed from the site for recycling.
2. The building foundations will be broken up and the refuse will be recycled, disposed of at a landfill, or buried on-site.
3. Embankment structures will be removed and embankment areas recontoured to be self-draining and nonimpounding. Diversion ditches will be leveled and stabilized.
4. The coarse ore stockpile will be stabilized and revegetated.
5. The shaft will be plugged with two levels of structural steel and concrete plugs, above and below the level of the Bird's Nest Aquifer. On the surface, the collar will be closed with a steel plate welded to the steel collar structure.
6. Existing improved roads will continue to be used. New roads constructed on the project site will be removed and reclaimed, with the exception of a few short segments.
7. The project site will be regraded to blend with existing land forms, and available soil materials will be respread in preparation for revegetation. The regraded area will be self-draining and nonimpounding.
8. Disturbed areas that were vegetated prior to disturbance will be revegetated with an appropriate grass-forb-shrub mixture. In areas that were previously nonvegetated (i.e., very rocky sites), a seedbed will be prepared, but seeding may not take place.

Surety

Reclamation surety for the first year of operation was estimated at \$606,440, in 1980 dollars. Using a 10 percent incremental inflation factor the 1982 total would be \$733,792. A copy of the bond estimate is attached. This amount will be revised after the first year and readjusted to include additional disturbances and inflation. The applicant has indicated a preference to purchase a surety bond.

DIVISION OF OIL, GAS, AND MINING
BOND ESTIMATE

OPERATOR: Tosco Development Corporation
MINE NAME: Sand Wash Development Shaft and Mine Project
LOCATION: Section 35, Township 9 South, Range 21 East
COUNTY: Uintah
DATE: June 17, 1982

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.	\$293,000	Lump Sum	\$293,000
	2. Removal of trash & debris.	Included		
	3. Leveling of ancillary facilities pads and access roads.	Included Below		
B.	REGRADING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	31.7 Acres	\$2681/acre	\$85,000
	2. Recontouring of highwalls and excavations, mining embankments.	3,000 c.g.	\$2.67 c.g.	\$8,000
	3. Spreading of soil or surficial materials.	31.7 Acres	\$500/acre	\$15,840
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	\$5,000	Lump Sum	\$5,000
	2. Seeding or planting.	33.8 Acres	\$2900/acre	\$98,600
	3. Construction of terraces, waterbars, etc.	N/A		
D.	LABOR			
	1. Supervision.	Included Above		
	2. Labor exclusive of bulldozer time.	Included Above		
	3. Mobilization and De-Mobilization	\$90,000	Lump Sum	\$90,000
E.	SAFETY			
	1. Erection of fences, portal coverings, etc. Shaft Closure	\$10,000	Lump Sum	\$10,000
	2. Removal or neutralization of explosive or hazardous materials.	N/A		
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.	Three Annual Inspections	Lump Sum	\$1,000
			1980 Dollars	\$606,440
G.	OTHER			
	Inflation Factor - 10% per year			127,352
				<u>733,792</u>

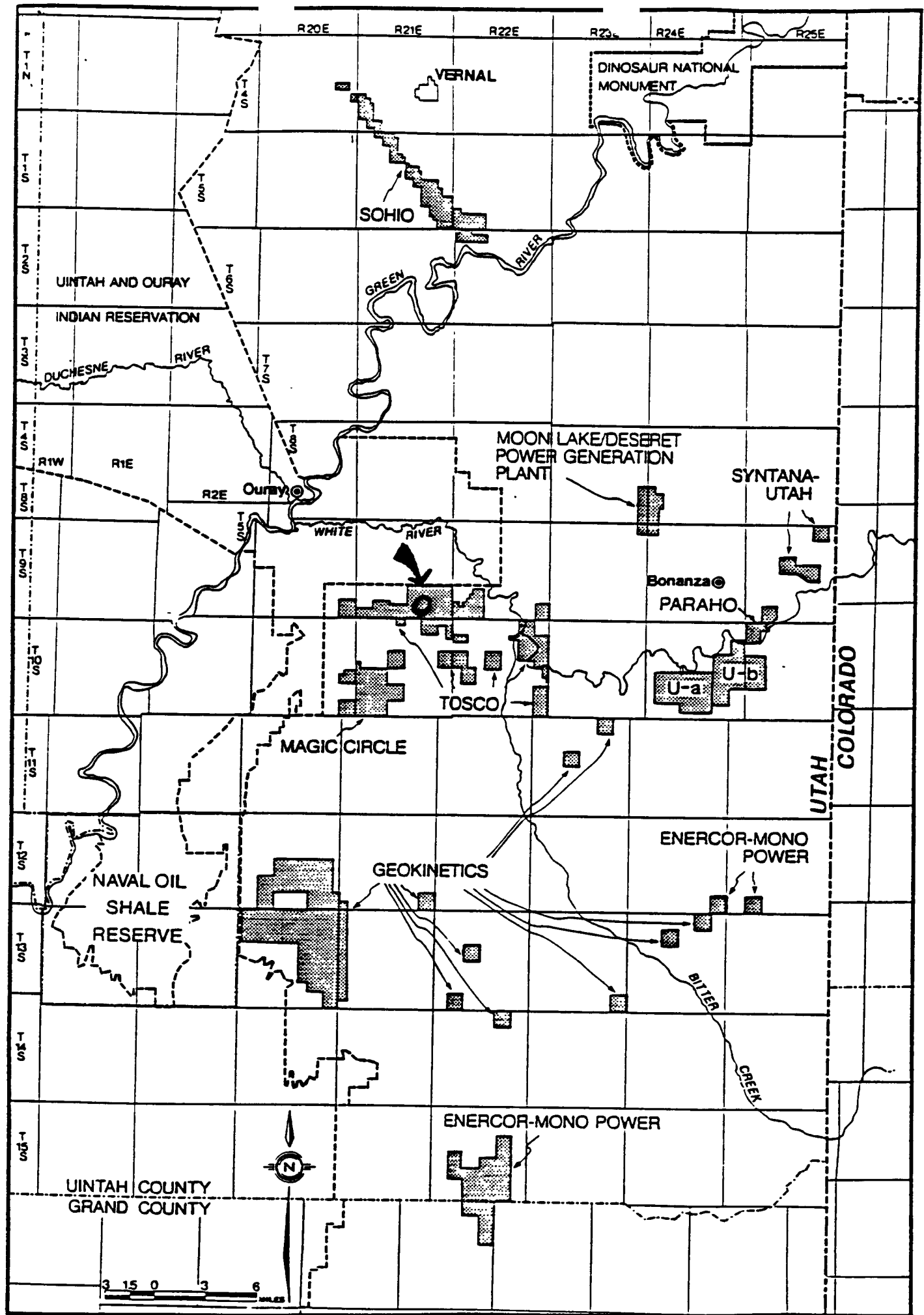


Figure 2.1-1

MINING SECTION BOARD HEARING AGENDA
FOR THE EXECUTIVE SESSION

1. Final discussion needed on the application for use of "personal guarantees" in bonding. Submittal of the proposal from the Utah Mining Association should be available. Discussion will be led by Ron Daniels.
2. Final concurrence requested on the proposed amendment to the existing and tentatively approved mining and reclamation plan for T. J. Murphy's Patented Tar Sands. The recent proposal has scaled the operation down from 30 acres of disturbance in five years to 17 acres in three years. The bond which the State will hold will be \$60,000 instead of \$140,000. The remainder of the originally approved plan will hold in effect. Questions will be handled by Cy Young.
3. Executive Summary presentation of Tosco Corporation's Sand Wash Project. Proposed for tentative approval and subject to the 30 day comment period. Susan Linner may present the summary.
4. A brief introduction of item #7 on the agenda (Cause No. ACT/019/001). Luki Milling Corporation has not submitted a bond to the State after tentative approval was issued for the placer gold mining operation over a year ago. Because the operation is on State lands, the Division of State Lands and Forestry issued an order for a minimum \$5,000 bond to be submitted within 30 days. This was not responded to by the company until the June State Lands Board Hearing. The company requested a few weeks more time to deliver the \$5,000 bond. At the time of this writing, no reply from the company has been given to the Division of Oil, Gas and Mining. Because surface disturbance has already occurred on the banks of the Colorado, this item still needs to be addressed by the company.




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MEMORANDUM

TO: Board of Oil, Gas and Mining

FROM: Thomas N. Tetting, Engineering Geologist 

SUBJECT: Utah Mining Association Proposal Covering Guidelines for Surety Contracts Including Personal Guarantees

DATE: June 16, 1982

Attached please find a copy of a recently endorsed proposal from the Utah Mining Association. They would like to have the Division and the Board consider the ideas put forth as an initial "blueprint" for the development of the concept to allow the use of personal guarantees (and determining criteria) for surety contracts. I was on hand during the Executive Board Meeting of the Utah Mining Association to field questions regarding their member's concerns about the nature and appropriateness of this submittal. I suggest that they are extremely concerned about the exclusion of this personal guarantee concept from the realm of possible surety arrangements with the Division. Therefore, they have taken the effort to put forth the criteria listed in the proposal for the use of the personal guarantee in surety contracts. Hopes are that the Board of Oil, Gas and Mining will be able to decide at the June Executive Session whether or not to continue the use of these personal guarantees. The Board should also consider whether or not to accept the attached proposal or refer it to the Division for further development. A decision should be reached. If personal guarantees are to be continued in use, should the new criteria be established as a guideline (implemented by the Division and the Board) or should they be made a part of the Rules and Regulations as the attached proposal suggests?

It is my sincere hope that the Board will be able to discuss and decide upon these matters at the next Executive Session. Please call Ron Daniels if you have any questions.

Attachment

TNT/btb

PROPOSED GUIDELINES FOR SURETY CONTRACTS TO
GUARANTEE RECLAMATION OBLIGATIONS

I. PURPOSE OF PROPOSAL.

The guarantee of reclamation obligations by surety contract is one of a number of alternative surety arrangements authorized under the Utah Mined Land Reclamation Act. The proposed guidelines herein establish a means to determine whether surety contracts are appropriate, based on the submittal of certain financial data to demonstrate financial stability. The purpose of the guidelines is to encourage qualified operators to commit to the cost of reclamation without having to bear the burden of setting aside financial resources which could be more productively used elsewhere.

The Mined Land Reclamation Act allows the Board of Oil, Gas, and Mining (the "Board") to approve a form of surety which may include "a written contractual agreement" (Utah Code Ann. §40-8-14(3)). In addition, the Board is required to consider the operator's financial status, assets within the state, history of performance, and facilities to carry out the work (Id.) These guidelines are intended to assist the Board in evaluating these factors as they may relate to such surety arrangements.

The legislature, in enacting §40-8-14(3), clearly intended to provide for flexibility in surety arrangements, which would allow the Board to ensure completion of reclamation obligations without unnecessary burdens on the operators. If an operator can demonstrate its continuing financial capability to comply with reclamation requirements, then there is no reason why the operator should be required to set aside needed funds or assets. This same consideration is reflected in the surety requirement regulations of a number of federal and state agencies which are discussed in more detail below.

Currently, Utah Code Ann. §40-8-14 is implemented by Rule M-5. The guidelines proposed herein would, if adopted, become a new Rule M-5A.

II. SUMMARY OF PROVISIONS.

Essentially, the proposal would allow for a surety contract between the Board and the operator. In support of the application for such a contract, the applicant would be required to provide certain financial data to the Board through the Division of Oil, Gas, and Mining (the "Division"). If the applicant is a publicly held company, it would be required to provide to the Board copies of various filings made with the United States Securities and Exchange Commission, particularly the 10-K report, which details the current financial health of

the company. If the applicant is not a publicly held corporation, it would be required to submit to the Board a financial statement prepared by an independent accountant.

The purpose of the requirement to provide copies of Securities and Exchange Commission filings is to ensure that the Board has all of the available data with regard to the financial health of the application. The Securities and Exchange Commission rules require strict full disclosure of a corporation's financial structure including not only profit and loss information, but also information with regard to management, outstanding litigation or enforcement, company holdings, and other similar information.

Under the proposal, the Board would approve the surety contract application if the materials submitted with the application demonstrate that the applicant has net worth sufficient to satisfy the reclamation obligations, has assets in the State of Utah sufficient to satisfy a judgment for reclamation should it be necessary to litigate the contract agreement, and has the physical capability, including staff expertise, to complete reclamation.

An application may be disapproved or an agreement may be revoked or modified by the Board after notice to the operator and the opportunity for the operator to present evidence or information on the matter at a hearing before the Board, if the operator so desires.

III. OTHER REGULATIONS.

The surety contract is essentially a self-bonding agreement. Such self-bonding arrangements are not unique. For example, the Environmental Protection Agency, the Office of Surface Mining Reclamation and Enforcement, and the Wyoming Department of Environmental Quality all have self-bonding regulations. In addition, the Nuclear Regulatory Commission is actively considering a self-bonding proposal for mill tailings.

All of the self-bonding regulations are based on the necessity to satisfy the regulatory authority of the financial stability of the applicant. The various financial criteria in these regulations are tailored to the particular purpose of the regulation. For example, in the Environmental Protection Agency regulations (40 CFR Part 264 (Subpart H) and 265 (Subpart H); 47 Fed. Reg. 15032-15074 (April 7, 1982)), the EPA has established detailed financial test criteria to support the financial assurance relating to closure and post-closure of hazardous waste treatment, storage, and disposal facilities. The financial tests consist of two basic alternatives, one of which is tied to the bond rating used by Standard and Poor's or Moody's. In its preamble to the regulations, the EPA indicates that the purpose of the bond rating criteria is to accommodate utilities, which, because of unique financial structures, cannot use the more traditional financial criteria (47 Fed. Reg. 15034).

It should be noted that the EPA regulations are designed not only to provide for financial assurance for the closure of a hazardous waste management facility but also to provide assurance for the post-closure maintenance of the facility into the indefinite future. In addition, the EPA is concerned with literally thousands of hazardous waste management facilities, with the result that it cannot deal with case-by-case determinations as well as an agency which regulates a much smaller number of facilities.

The OSM self-bonding regulations (30 CFR Subchapter J; 45 Fed. Reg. 52306 (August 6, 1980)) require not only evidence of financial stability for self-bonding, but also collateral or security interests in favor of OSM sufficient to guarantee the self-bond. OSM operates under a very detailed and extensive set of reclamation regulations which do not allow much flexibility with regard to designing a reclamation plan. As a result, OSM has imposed a very strict set of self-bonding regulations. It should be noted, however, that OSM has proposed new bonding regulations (40 Fed. Reg. 45082 (September 30, 1981)) which would eliminate the requirement for putting up personal or real property as collateral to back the self-bonding arrangement.

The NRC is considering self-bonding regulations for uranium mill tailings reclamation. At this point, the NRC has not formally made any proposal, although it has indicated it is

examining a number of self-bonding regulations. It should be noted that the NRC is concerned not only with reclamation of mill tailings but also with long-term stabilization and maintenance. In this regard, it should be noted that the Uranium Mill Tailings Control and Reclamation Act provides for the transfer to the federal or state government, as appropriate, of reclaimed uranium mill tailings sites to ensure long-term stability.

In comparing self-bonding regulations with the guidelines proposed herein, a number of important considerations should be kept in mind. First, the Board of Oil Gas and Mining oversees a relatively small number of operations. As a result, it is easier for the Board to make decisions on a case-by-case basis. In addition, the purpose of the Mined Land Reclamation Act is to require reclamation of disturbed lands, after which the operator will be under no further obligation insofar as involvement with the reclaimed lands is concerned. This means that the financial burdens surrounding reclamation will essentially disappear after the reclamation is complete.

The proposed guidelines are designed for mine operations. Because of the unique problems and circumstances surrounding uranium mill tailings reclamation, uranium mill tailings reclamation sureties should be governed by a different set of procedures. It may be advisable to consider separate surety regulations relating to uranium mills in order to be consistent with the NRC regulations once they have been published.

UTAH BOARD OF OIL, GAS AND MINING

PROPOSED GUIDELINES FOR SURETY CONTRACTS TO
GUARANTEE RECLAMATION OBLIGATIONS

(RULE M-5A)

Utah Code Ann. § 40-8-14

RULE M-5A - SURETY CONTRACTS.

- (a) An application for surety contract shall contain the following information:
- (1) Identification of operator.
 - (2) Identification of operation(s).
 - (3) Identification of record mineral owner(s) of land(s) to be mined.
 - (4) Estimated reclamation costs.
 - (5) Nature of activity(ies) or obligation(s) to be covered by contract, including dates of commencement and conclusion. The requirement may be satisfied by reference to the approved reclamation by plan or plans, as appropriate.
 - (6) Other sureties or bonds in the State of Utah.
 - (7) If the applicant is a publicly held corporation,
 - (i) A copy of the latest 10-K report submitted to the United States Securities and Exchange Commission.

- (ii) Any other required report or registration statement submitted by the applicant to the United States Securities and Exchange Commission and the Utah Securities Commission within the preceding year.

If the applicant is not a publicly-held corporation,

- (i) A financial statement prepared by an independent certified public accountant under generally accepted accounting principles.

- (8) A description of the facilities, equipment and material in applicant's possession or control, or available to applicant to carry out reclamation work. This requirement may be satisfied by referring to the applicable portion of the approved reclamation plan or plans covering the reclamation.

(b) Applicant shall submit the following annual reports to the Division:

- (1) If applicant is a publicly-held corporation, a copy of the applicant's latest 10-K report submitted to the United States Securities and Exchange Commission.
- (2) If applicant is not a publicly held corporation, a copy of a current financial statement prepared and certified by an independent certified public accountant under generally accepted accounting principles.

(c) The Board shall approve an application for surety contract if the application and supporting materials demonstrate the following:

- (1) Applicant has net working capital and tangible net worth sufficient to satisfy the reclamation obligations.
- (2) Applicant has sufficient assets (both real and personal property) in the State of Utah to satisfy a judgment for the costs of reclamation.
- (3) Applicant has sufficient staff expertise available to carry out and/or supervise the required reclamation work. Supervision includes the capability to contract all or part of the required reclamation work to other parties.

(d) Upon approval of the application by the Board, the Board and the applicant shall execute a surety contract establishing the following terms and conditions:

- (1) The duration of the obligation.
- (2) The estimated reclamation costs, with the provision that the estimated costs may be adjusted periodically by the Division after notice to the applicant and opportunity for hearing before the Board, if requested by the applicant.
- (3) A reference to the reclamation plan or plans covered by the obligation.

(4) The procedures for invoking the obligation if the reclamation plan or plans are not followed in whole or in significant part.

(e) The Board may disapprove an application for surety contract or revoke or substantially modify a contract only after thirty days' notice to the operator and after allowing the operator a hearing on the record before the Board, if the operator so desires. In such a hearing, the operator shall have the right to call and cross-examine witnesses and present such credible evidence as it may deem necessary to support the contract.




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M E M O R A N D U M
* * * * *

TO: Board of Oil, Gas and Mining

FROM: Thomas N. Tetting, Engineering Geologist 

SUBJECT: T. J.'s Patented Tar Sands Mining Operation
ACT/019/014
Grand County, Utah

DATE: June 16, 1982

The Division received a revised plan of operations dated June 7, 1982 from Big Horn Oil, Inc. This plan was drafted in light of recent attempts by the company, acting on behalf of T. J. Murphy, to obtain a bond in the amount prescribed originally. The new plans are a scaled down version of the original Mining and Reclamation Plan (MRP) and have a permit review term for two years less (now three years). New calculations for the bond have brought the inflated value proposed to \$60,000. Aside from these changes and those noted on the recently submitted maps and plans, all other commitments in the original MRP will be adhered to as stated. These have been given approval by the Division.

Attachment

TNT/btb

DIVISION OF OIL, GAS, AND MINING

BOND ESTIMATE

OPERATOR: T. J. Murphy
MINE NAME: T. J.'s Patented Tar Sands
LOCATION: Section 5, T. 16 S., R. 24 E.; Sec. 32, T. 15 1/2 S., R. 24 E.
COUNTY: Grand
DATE: June 11, 1982

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.			
	2. Removal of trash & debris.	Lump Sum		\$ 5,000
	3. Leveling of ancillary facilities pads and access roads.			
B.	REGRADEING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	10 ac	\$1,000/ac	\$20,000
	2. Recontouring of highwalls and excavations.	Included Above		
	3. Spreading of soil or surficial materials.	8,000yd ³	\$2/yd.	\$16,000
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	17 ac/ave	\$300/acre	\$ 5,100
	2. Seeding or planting.			
	3. Construction of terraces, waterbars, etc.	Included Above		
D.	LABOR			
	1. Supervision.			
	2. Labor exclusive of bulldozer time.	Included Above		
E.	SAFETY			
	1. Erection of fences, portal coverings, etc.			
	2. Removal or neutralization of explosive or hazardous materials.	Not Applicable		
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.	3 annual inspection (reseed if necessary)		\$ 300
		17 ac		\$ 5,100
G.	OTHER			
	13% inflation over three years			41,500*
	*Reevaluate after three years.			\$60,000